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Shin-Hyun Yang

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EXAMINER

RYMAN, DANIEL J

ART UNIT

PAPER NUMBER

2665

DATE MAILED: 03/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/863,483

Applicant(s)

YANG, SHIN-HYUN

Examiner

Daniel J. Ryman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☒ Claim(s) 1 and 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

### ***Specification***

2. The abstract of the disclosure is objected to because it exceeds 150 words in length. Correction is required. See MPEP § 608.01(b).
3. The disclosure is objected to because it does not contain a discussion of Figs. 1-5. A description of these drawings would allow a reader to gain a better understanding of the invention.

Appropriate correction is required.

### ***Claim Objections***

4. Claims 1 and 7 are objected to because of the following informalities: in line 9 of claim 1 and in line 10 of claim 7, "CM" should be "connection management (CM)". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marchand (USPN 6,714,515), of record, in view of Almgren et al. (USPN 6,668,175), of record, in further view of Menon (USPN 6,526,026).

7. Regarding claim 1, Marchand discloses a method for processing a signal and a bearer separately in an ALL IP network system including one or more mobile stations (col. 1, lines 8-17 and col. 1, lines 29-31), one or more radio networks (col. 1, lines 8-17 and col. 3, line 61-col. 4, line 6), and one or more core networks (IP network) (col. 1, lines 8-17 and col. 7-30), the method comprising the steps of: a) transmitting a service request message (call request) from a mobile station to a radio network (col. 6, lines 56-62); b) at the radio network, determining whether a circuit related service or a packet-related service is requested (col. 3, lines 32-37); d) if the packet-related service is requested: (i) transmitting the service request message from the radio network to a core network (BB) without processing the service request message (Fig. 3; col. 6, lines 16-42; and col. 7, lines 56-67); (ii) at the core network, processing the service request message and requesting that the connection be made (Fig. 3; col. 6, lines 16-42; and col. 7, lines 56-67).

Marchand does not expressly disclose that d)(ii) the core network transmits an assignment request to the radio network, the assignment request requesting that the radio network to assign the bearer for user data and d)(iii) that the radio network assigns the bearer in response to the assignment request. Almgren teaches, in a system for providing radio access bearer services, having the radio network assign the bearer for user data and having the radio network assign the bearer in response to an assignment request transmitted from the core network since the radio network controls the bearers (col. 6, lines 20-30; col. 8, line 43-col. 9,

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line 25; col. 10, lines 24-47; col. 12, lines 1-14; col. 15, lines 58-63; and col. 16, lines 6-8) where “bearer is translated back over the Iu interface ... to the application” suggests that the bearer is assigned in the radio network since the bearer is sent over the radio network/core network interface to the application which is in the core network. It would have been obvious to one of ordinary skill in the art at the time of the invention to assign the bearer for user data and to assign, by the radio network, the bearer in response to an assignment request transmitted from the core network since the radio network controls the bearers.

Marchand in view of Almgren does not expressly disclose that c) if the circuit-related service is requested: (i) transmitting a CM service request message to a mobile switching center (MSC) server; (ii) receiving a service request acknowledgement message from the MSC server; and (iii) assigning a bearer in response to the service request acknowledgement message. Menon teaches, in a radio communication system, c) if a circuit-related service is to be established: (i) transmitting a CM service request message to a mobile switching center (MSC) server (col. 31, lines 34-45); (ii) receiving a service request acknowledgement message (“CM Service Accept Message”) from the MSC server (col. 31, lines 34-45); and (iii) assigning a bearer in response to the service request acknowledgement message (col. 25, lines 25-45; col. 32, lines 17-20; and col. 33, lines 10-15) where it is implicit that this signaling is required in order to establish a circuit-switched call. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to c) if the circuit-related service is requested: (i) transmitting a CM service request message to a mobile switching center (MSC) server; (ii) receiving a service request acknowledgement message from the MSC server; and (iii) assigning a bearer in response to the service request acknowledgement message in order to connect the circuit-switched call.

Regarding claim 7, incorporating the rejection of claim 1, Marchand in view of Almgren in further view of Menon disclose each limitation in claim 7, as outlined in the rejection of claim 1, except that the method is implemented using software. Examiner takes official notice that it is well known to use software to implement a method since software is more flexible than hardware. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement the method using software since software is more flexible than hardware.

8. Regarding claim 2, Marchand in view of Almgren in further view of Menon discloses that the radio network includes a radio network control system (RNCS) (Marchand: RNS on col. 6, lines 16-24) and a radio bearer function (RBF) unit, the RBF unit performing bearer assignment (Almgren: col. 9, lines 12-13 and col. 10, lines 24-47) where it is implicit that the RAN has a means for assigning bearers.

9. Regarding claim 3, Marchand in view of Almgren in further view of Menon discloses that the core network includes the MSC server (Almgren: col. 13, line 66-col. 14, line 8) and a session manager, the session manager managing a packet-related message (Marchand, BB: col. 5, lines 18-22 and Almgren: col. 5, line 66-col. 6, line 12 and col. 6, lines 51-65).

10. Regarding claim 4, Marchand in view of Almgren in further view of Menon discloses that whether the circuit-related service or the packet-related service is requested is determined by reading an address of a TCP/IP header allocated to each service request message (Marchand: col. 6, lines 56-62 and Almgren: col. 1, lines 43-52; col. 6, lines 20-28; and col. 8, lines 2-23).

11. Regarding claim 5, Marchand in view of Almgren in further view of Menon suggests that if the address of the TCP/IP header has an address of the session manager, it is determined that the packet-related service is requested (Marchand: col. 6, lines 56-62 and Almgren: col. 1, lines

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43-52; col. 6, lines 20-28; and col. 8, lines 2-23) where a packet is sent to a particular device using an address such that having an address of the session manager suggests that the data is packet data.

12. Regarding claims 6 and 8, Marchand in view of Almgren in further view of Menon suggests that step d)(iii) includes the steps of: (A) transmitting a response message related to the service request from the RNCS to the mobile station (Marchand: col. 6, lines 16-24) where the mobile needs to be notified of the bearer; (B) at the RNCS, requesting that the RBF unit assign the bearer (Marchand: col. 6, lines 16-24 and Almgren: col. 9, lines 12-13 and col. 10, lines 24-47); and (C) at the RBF unit, assigning the bearer (Almgren: col. 9, lines 12-13 and col. 10, lines 24-47) where it is implicit that the RAN has a means for assigning bearers.

### *Conclusion*

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Ryman whose telephone number is (571)272-3152. The examiner can normally be reached on Mon.-Fri. 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571)272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DR  
Daniel J. Ryman  
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Art Unit 2665



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